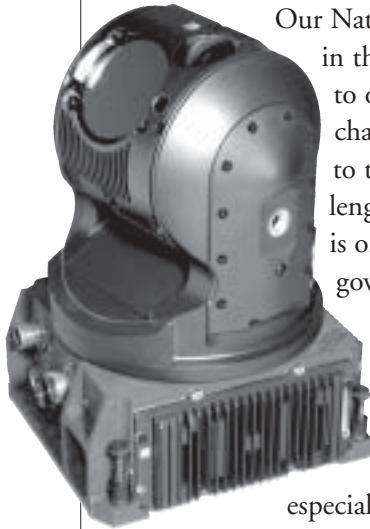


SMART: The Army's Way of Doing Business

George R. Harris



The Army learned valuable lessons by applying SMART to the ATIRCM program.

Our Nation's successes in the past were due to our ability to change and adapt to the new challenges we faced. It is only natural that government should seek out and reap the benefits of emerging technologies, especially those shown to be successful by academia and the private sector. The

Army's Simulation and Modeling for Acquisition, Requirements and Training (SMART) initiative is intended to anticipate and accelerate the use of modeling and simulation (M&S) and related information age technologies. For the past 6 years, the Army has capitalized on these emerging technologies, and significant gains have been made. The Army has used SMART to improve our requirements development, acquisition and training capabilities. The SMART concept is about how we change the way we do business to exploit the potential of M&S and other emerging information age technologies, and ensure collaboration and synchronization across total Army system life cycles.

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The SMART Success Formula: M&S + IT = ACE

The Advanced Collaborative Environment (ACE) is an integral SMART concept element and will be vital to our success in fielding Future Combat Systems (FCS). Collaboration — a level of information sharing — is a key SMART tenet. It often requires using a whole information technology (IT) suite to sustain an effective environment in which true collaboration can be achieved. This environment is where M&S benefits and efficiencies are recognized. M&S, in concert with IT, provides the capability to build and sustain the robust collaborative environment in an emerging network-centric world.

Imagine the traditional clay model of auto industry lore as a digital model. Instead of using clay to enable collaboration among participants in a room, we now use electrons to enable collaboration among stakeholders distributed geographically around the world. The most effective "what-if" analysis is done while the model is still in the computer. We must use M&S to discover "the better mousetrap" before "bending metal."

Expensive hardware prototypes should be replaced, to the extent possible, with models and simulations. M&S and IT enable crucial "what-if" analysis

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PRACTICES



while ensuring that key production, training and sustainment knowledge is readily shared by all stakeholders early in the development cycle. To field better systems at lower cost and in less time, we must be "smart" about how we do business. Case in point, the FCS program recognized the need for ACE and has implemented this current capability into its program structure.



AMSO Director W.H. (Dell) Lunceford Jr. (left) presents the SMART Lifetime Achievement Award to James E. Shiflett, FCS Integrated Product Team Director.

SMART Awareness

There is a tendency to use the terms SMART and M&S interchangeably, but there is a distinction to be made that is critical to successful future force fielding. SMART has driven a much-needed change in Army business practices. By exploiting M&S and IT and ensuring collaboration and synchronization across the total life cycle of Army systems, the Army Model and Simulation Office (AMSO), the



Advanced Concepts and Requirements Domain Manager Vern Bettencourt "collaborates" with Training, Exercises and Military Operations Domain Manager Jim Gunlicks at the latest SMART Conference.

Army's SMART Executive Agent, is working hard to increase SMART awareness. The SMART Web site (<http://www.amso.army.mil/SMART/>) and SMART conferences, respectively, are must-see and must-attend information sources helping AMSO succeed in this endeavor.

The SMART Web site includes valuable information aimed at helping organizations adopt SMART principles into their routine business practices. Particularly interesting are the site's "What is SMART?" and "Lessons Learned" sections. The



Then MG Joseph L. Yakovac Jr., PEO Ground Combat Support, opens the SMART Conference. LTG Yakovac is now the Director, Army Acquisition Corps.

former provides the Army's vision for SMART and online tutorials that can be played at the student's convenience. The latter are drawn from the experiences of programs such as the Aerial Common Sensor, the Advanced Threat Infrared Counter Measures (ATIRCM) and the Joint Common Missile, and information captured here will benefit many programs Armywide. If your organization has valuable SMART lessons learned, let AMSO know via the SMART Web site. A team will contact you to discuss lessons learned. Also available on the Web site are documents that provide "how-to" information on implementing SMART principles across the various Army communities. Additionally, SMART conference information dating back to 2000 is archived for reference purposes.

SMART conferences will continue to be instrumental in sustaining Army — and we hope DOD — momentum in making SMART the way to do business. The next SMART conference is projected for June 2005. The recently completed SMART conference, co-sponsored by AMSO and the U.S. Army Tank Automotive Research, Development and Engineering Center in Dearborn, MI, sharpened military, civilian and industry M&S professionals' focus on upcoming FCS Milestone C (Systems Development and Demonstration) challenges.

The stakes are high. Attendees at this conference were, for the most part, the same people who will determine success or failure of FCS Milestone C and follow-on efforts to field the Future Force. SMART is crucial to

these efforts and especially important for achieving leadership objectives to field initial FCS operational capabilities by decade's end. Attendance, which increased by 28 percent over the prior conference, may well indicate that SMART is gaining momentum.

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While our SMART understanding improves, our top priority is teaching other Army organizations to successfully apply SMART to the way we do business. SMART tutorials are available online and, in the area of product research and development, SMART contact teams

are available to meet with science and technology objective managers, integrated concept team leads and program managers to discuss how to plan for and document M&S use in their programs. Army objectives to field initial Future Force operating capability by the end of this decade depend on taking our understanding of SMART to heart and implementing the concept within our own day-to-day practices.

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